

2004 U.S. FISHERIES BYCATCH REDUCTION  
STANDARDS AND MEASURES RELEVANT TO SECTION 202(h) OF THE  
MAGNUSON-STEVENSON FISHERY CONSERVATION AND MANAGEMENT ACT

Section 202(h)(1) of the Magnuson-Stevens Fishery Conservation and Management Act (Act) states that the Secretary of State, in cooperation with the Secretary of Commerce, "shall seek to secure an international agreement to establish standards and measures for bycatch reduction that are comparable to the standards and measures applicable to United States fishermen for such purposes in any fishery regulated pursuant to this Act for which the Secretary [of Commerce], in consultation with the Secretary of State, determines that such an international agreement is necessary and appropriate." Similar provisions are contained in both the Marine Mammal Protection Act (MMPA) and the Endangered Species Act (ESA).

Section 202(h)(3) of the Act requires that the Secretary of Commerce, in consultation with the Secretary of State, submit annually to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Resources of the House of Representatives a report describing actions pursuant to Section 202(h)(1) of the Act.

In the September 2000 Annual Report to Congress on International Bycatch Reduction Agreements, the National Marine Fisheries Service (NMFS) concluded, and the Department of State concurred, that seeking international agreements with foreign nations conducting pelagic longline fishing operations for Atlantic and Pacific highly migratory species was necessary to protect endangered and threatened sea turtles. An international strategy, referred to as the Course of Action to Promote International Agreements that Address the Need to Reduce Sea Turtle Bycatch in Foreign Longline Fisheries, was subsequently developed to address this issue and detailed in the June 2001 Report to Congress on International Bycatch Reduction Agreements.

In January 2002, the International Bycatch Reduction Task Force was convened to develop a Plan of Action to implement the sea turtle bycatch strategy. This Task Force was made up of Agency and Department of State personnel. Although the initial focus of this group was to further discussions and ultimately to reduce sea turtle bycatch in longline fisheries internationally, the issues of incidental catch of seabirds in longline fisheries and the conservation and management of sharks were quickly added to the work of the Task Force. More information on the Course of Action to Promote International Agreements that Address the Need to Reduce Sea Turtle Bycatch in Foreign Longline Fisheries and the activities of the International Bycatch Reduction Task Force is available from NMFS.

In this report, NMFS has reviewed management measures for January 2004 through December 2004 under all approved and implemented fishery management plans that address fish stocks also harvested by foreign fishermen to identify relevant bycatch standards and measures. A description of these bycatch standards and measures by region, an update on initiatives identified in previous reports (where relevant), and NMFS conclusions on the necessity and appropriateness of seeking international agreements establishing comparable standards and

measures follow. Additionally, this report provides steps taken internationally by members of the International Bycatch Reduction Task Force in implementing the current U.S. strategy for international bycatch reduction.

### NORTHEAST REGION

Amendment 10 to the Atlantic Sea Scallop Fishery Management Plan implemented measures that were directly and/or indirectly designed to reduce bycatch in the fishery. These measures included an increase in the minimum ring size for scallop dredges from 3.5 to 4 inches, a minimum twine top mesh size of 10 inches inside measure, and a proactive protected species program to react to interaction issues as they arise. The rotational management strategy implemented by Amendment 10 and the follow-up Framework 16 is intended to increase efficiency of the fishery and should result in less effort, habitat impacts, and bycatch of small scallops and finfish. Framework 16 also established total allowable catches of yellowtail flounder for the scallop fishery. Atlantic sea scallops are caught by Canadian fishing vessels in Canadian waters.

Amendment 13 to the Northeast Multispecies Fishery Management Plan implemented numerous measures to end overfishing, rebuild groundfish stocks, protect Essential Fish Habitat, and minimize bycatch. Among the bycatch reduction measures were: a reduction in overall effort (Days-at-Sea) in the fishery; new trip and possession limits; seasonal fishing restrictions; “hard” total allowable catches for certain species and areas; full retention of Georges Bank cod caught by the Georges Bank Cod Hook Sector; additional bycatch reporting requirements, including Vessel Monitoring System reporting and increased observer coverage; selective gear requirements; and Habitat Closure Areas. Framework 40-A established incidental catch quotas and effort caps to prevent overfishing and discarding of groundfish stocks of concern. Groundfish are caught by Canadian fishing vessels in Canadian waters.

### SOUTHEAST REGION

Effective February 9, 2004 (69 FR 1538), the final rule to implement Amendment 10 to the Fishery Management Plan for the Shrimp Fishery of the Gulf of Mexico required, with limited exceptions, the use of NMFS-certified bycatch reduction devices in shrimp trawls in the Gulf of Mexico exclusive economic zone east of Cape San Blas, Florida. Shrimp from the Gulf of Mexico are caught by Mexican fishing vessels in the Gulf of Mexico.

### ATLANTIC HIGHLY MIGRATORY SPECIES

In addition to the closed areas (areas of the South Atlantic Bight, Gulf of Mexico, and off New Jersey), observer coverage, VMS for pelagic longline vessels, reporting requirements, dead discard accounting, and bycatch limits already in place for U.S. fishermen (see previous reports for full descriptions of these measures), the United States has implemented new measures to reduce bycatch in Atlantic HMS fisheries. These measures include:

Sea turtle bycatch reduction: The United States has concluded a three year research program to reduce sea turtle bycatch and bycatch mortality in the U.S. Atlantic pelagic longline fishery. The research was conducted using commercial vessels as research platforms in the Grand Banks area. The experiment tested fishing protocols using bait types and hook types and also tested release and handling gear.

The United States implemented regulations, effective August 5, 2004, for the entire U.S. Atlantic pelagic longline fishery, based on this research that limits hook and bait types to minimize sea turtle bycatch and bycatch mortality. Vessel operators aboard all U.S. permitted vessels, or those required to be permitted, for Atlantic HMS with pelagic longline gear onboard must possess and maintain line cutters and dipnets meeting newly revised design and performance standards. These vessel operators must also possess, maintain, and utilize additional equipment, in compliance with NMFS' careful release protocols, to remove fishing gear from incidentally-captured sea turtles. Required handling and release gear is described in the Technical Memorandum "NOAA Fisheries-Approved Models For Equipment Needed For The Careful Release of Sea Turtles Caught In Hook And Line Fisheries" (NMFS-SEFSC-524). A training video on release and disentanglement techniques was also published. NMFS also conducted eleven workshops for pelagic longline fishermen to demonstrate proper release and handling protocols during 2004. The protocols and video will be released in Spanish and Vietnamese in January 2005.

Shark Time/Area Closure: The United States implemented a time/area closure in the mid-Atlantic Bight for directed shark fishermen using bottom longline gear from January 1-June 30 annually. This closure is designed to reduce bycatch and bycatch mortality of juvenile sandbar and prohibited dusky sharks. The closure becomes effective on January 1, 2005 (December 24, 2003, 68 FR 74746).

Vessel Monitoring Systems (VMS): Effective November 15, 2004 (August 17, 2004, 69 FR 51010), directed shark vessels with gillnet gear onboard, regardless of location, are required to have VMS installed and operating during Right Whale Calving Season (November 15 – March 31). As of January 1, 2005, directed shark vessels with bottom longline fishing gear onboard that are located between 33° and 36° 30' N latitude will be required to have VMS installed and operating during the mid-Atlantic shark closure (January 1 – July 31). The VMS requirement was finalized on December 24, 2003 (68 FR 74746), and had been delayed pending a type-approval notice that was published on April 15, 2004 (69 FR 19979).

Increased observer coverage: The United States continued to place observers on pelagic longline fishing vessels. During the experiment, a target of eight percent coverage of the fishery was designated for vessels operating outside of the Northeast Distant Water (NED) experimental fishery. Observer coverage of vessels operating in the NED experimental fishery was 100%. Total observer coverage for the fourth quarter of 2003 was slightly better than 14% by set and 17% by number of hooks set. Now that the experiment is complete, the United States intends to have a minimum of eight percent observer coverage for all pelagic longline vessels.

In support of its domestic actions, the United States has been pursuing action relative to bycatch reduction measures at ICCAT. ICCAT is the international body charged with coordinating the management of highly migratory species throughout the Atlantic Ocean and adjacent seas.

#### NORTHWEST REGION

Effective May 1, 2004 (May 4, 2004, 69 FR 24524), participants in the non-tribal commercial and recreational fisheries for halibut off the U.S. West Coast are prohibited from operating within Rockfish Conservation Areas (RCAs). The RCAs are intended to protect overfished groundfish from incidental catch in the halibut fisheries. Pacific halibut catch quotas are set by the International Pacific Halibut Commission, a U.S.-Canada fisheries commission.

Effective July 7, 2004 (June 7, 2004, 69 FR 31751), processing vessels that are at least 125 ft (38.1 mt) in length are required to carry at least two observers while participating in the West Coast groundfish fisheries. Processing vessels under 125 ft (38.1 mt) in length are required to carry at least one observer while participating in the West Coast groundfish fisheries. At this time, only processing vessels participating in the Pacific whiting fishery operate in the West Coast groundfish fisheries. Pacific whiting is managed by joint agreement with Canada. This requirement is intended to allow in-season monitoring of total catch of all species in the at-sea Pacific whiting fisheries, including bycatch of salmon and overfished groundfish.

#### SOUTHWEST REGION

NMFS implemented management measures for the highly migratory species (HMS) fisheries based in Washington, Oregon, and California effective May 7, 2004 (69 FR 18444, April 7, 2004), that include permits for all commercial vessels; catch reporting and recordkeeping requirements, including bycatch reporting; and catch restrictions, including specific requirements for sea turtle handling and resuscitation. Longline vessels are prohibited from fishing in the EEZ and from fishing “shallow set” for swordfish west of 150° W. long. In addition, they must comply with seabird protection measures and seasonal closed areas. The shallow set longline fishery was also closed on the high seas east of 150° W. long. by a companion rule issued under the Endangered Species Act, effective April 12, 2004 (69 FR 11540, March 11, 2004). Drift gillnet fisheries must comply with marine mammal take reduction measures regarding gear and seasonal closed areas.

These management measures regulate tuna fisheries that are also regulated internationally by the Inter-American Tropical Tuna Commission (IATTC), which governs all international fishing. The Albacore Tuna treaty with Canada is regulated domestically through these management measures. In addition, fisheries to be regulated by the new Western Central Pacific Fisheries Commission will be regulated domestically through these management measures.

#### PACIFIC ISLANDS REGION

NMFS implemented management measures for the highly migratory species fisheries based in Hawaii effective April 2, 2004 (69 FR 17330, April 2, 2004), instituting new management

measures that allowed reopening the longline “shallow set” fishery for swordfish north of the equator and the elimination of a seasonal closure. New management measures (1) create an annual effort limit on shallow sets at half of historical effort, (2) divide the sets among the vessels desiring to participate in the fishery, (3) limit vessels to the number of shallow set certificates they have on board, (4) require the submission of logbooks consistent with sets made, (5) require mandatory use of circle hooks (6) require mandatory use of mackerel-type bait, (7) set mandatory limits on the number of leatherback and loggerhead sea turtles, (8) establish procedures to close the fishery if the limits are reached, (9) require operators to notify NMFS in advance of the type of longline operations (shallow or deep set) they will conduct, (10) require the carriage and use of sea turtle dehooking devices, and (11) require that vessels making shallow-sets north of 23° N. lat. make their sets during nighttime. NMFS has also instituted a 100-percent observer requirement for vessels engaged in the shallow set fishery.

These management measures regulate tuna fishing from Hawaii and other U.S. possessions in the Pacific that are regulated internationally by the IATTC. In addition, fisheries to be regulated by the new Western Central Pacific Fisheries Commission will be regulated domestically through these management measures.

#### ALASKA REGION

No new measures specifically to reduce bycatch were implemented in 2004.

#### MARINE MAMMAL PROTECTION ACT ACTIVITIES

NMFS published its final List of Fisheries (LOF) for 2004 as required by the MMPA (69 FR 48407). The final LOF reflects new information on interactions between commercial fisheries and marine mammals. The LOF places all commercial fisheries into one of three categories based on the level of incidental serious injury and mortality of marine mammals that occur in each fishery.

#### OTHER ACTIVITIES- INTERNATIONAL BYCATCH REDUCTION

Larger Turtle Excluder Device Openings: Public Law 101-162 mandates that shrimp exported to the United States must be harvested in a manner that is comparable to the sea turtle regulations of the United States. The law requires foreign governments whose shrimp trawl fleets adversely impact sea turtles to adopt programs requiring the use of turtle excluder devices (TEDs) if they want to export shrimp to the United States. Beginning in 2003, U.S. shrimp fishermen were required to use larger openings in their turtle excluder devices (TEDs). The larger openings allow leatherback sea turtles as well as large sexually mature loggerhead and green turtles to escape the shrimp nets. Due to the changes in U.S. requirements, large TED openings were required by August 31, 2004, for those nations that export wild-harvested shrimp to the United States. NMFS and the Department of State made 14 visits to these nations to inform them about the new TED opening requirements. NMFS and Department of State will be inspecting at least 6 nations between January through May 2005, to ensure that the new TED openings are in use.

International Bycatch Reduction Task Force : In January 2002, NMFS convened an International Bycatch Reduction Task Force made up of Agency and U.S. Department of State representatives. The Task Force subsequently developed a Plan of Action to: 1) implement the strategy to promote international agreements that reduce sea turtle bycatch in foreign longline fisheries; and 2) promote the implementation of the Food and Agriculture Organization (FAO) International Plan of Action (IPOA) for Reducing Incidental Catch of Seabirds in Longline Fisheries and the FAO IPOA for the Conservation and Management of Sharks.

The Task Force Plan of Action outlines steps to be taken in implementing the U.S. strategy for international bycatch reduction. These tasks are broken up into three categories: 1) international sea turtle workshops, technology transfer, and gear experiments; 2) international communications relating to sea turtles, sharks and seabirds; and 3) other task force activities. Task Force activities during 2004 relating to these categories include the following:

1) International Sea Turtle Workshops, Technology Transfer, and Gear Experiments: The 2004 activities of the Task Force relating to sea turtles were greatly affected by two studies in the eastern and northwestern Atlantic Ocean that evaluated the utility of changes in commercial longline fishing gear and practices to reduce sea turtle bycatch. These studies successfully identified modifications that can help to reduce sea turtle bycatch in longline fisheries for swordfish. Along with these hook/bait studies, a number of tools have recently been developed that can improve the survival for turtles after release. A selection of 2004 activities relating to workshops, technology transfer, and gear research are included below.

- *International Sea Turtle Workshops and Meetings:* During 2004, Task Force members involved in longline bycatch research presented at a number of other workshops and meetings, including: the IATTC Bycatch Working Group (January 2004 in Japan); the Sea Turtle Symposium (February 2004 in Costa Rica); the American Fisheries Society meeting (2004 in Quebec, Canada); the WPFMC Western Pacific Sea Turtle Cooperative Research and Management Workshop (May 2004 in Hawaii); The World Fishery Congress (May 2004 in Vancouver, B.C.); the NFRDI Symposium on Bycatch Reduction (June 2004 in Korea); the 4<sup>th</sup> International Fisheries Observer Conference (November 2004 in Australia); and the FAO COFI Technical Consultation on Sea Turtle Conservation and Fisheries (November 29- December 2, 2004 in Thailand).
- *Technology Transfer and Outreach:* During 2004, Task Force members assisted in the planning and/or execution of international and domestic workshops focusing on technology transfer and outreach relating to reduction of sea turtle bycatch in longline fisheries. These workshops focused on transfer of circle hook and bait technology to Latin American and Asian countries that have longline fleets that interact with sea turtles (e.g., Ecuador, Peru, Costa Rica, Uruguay, Korea, Japan, Panama, Guatemala, the Federated States of Micronesia, Papua New Guinea, and the Marshall Islands).
- *Gear Experiments:* Task Force members have planned and/or initiated collaborative research relating to circle hook technology with a large number of countries (Ecuador, Costa Rica, Chile, Uruguay, and others) and future collaborative research is thus far

planned with the Azores, Japan, Brazil, Guatemala, and other Asian longlining nations. Additionally, a Memorandum of Understanding has been developed with IMARPE (Peru) to collaborate on sea turtle/fisheries research.

2) International Seabird Workshops/Technology Transfer/Gear Experiments: A number of Task Force members also participate as members of an Interagency Seabird Working Group, which works to increase coordination and collaboration between Government agencies involved in the implementation of the U.S. National Plan of Action (NPOA) for Seabirds. A number of international workshops, gear experiments, and activities to promote technology transfer relating to reduction of seabird bycatch occurred during 2004. Thus, a section on these efforts has been included below.

- *International Seabird Workshops and Meetings:* During 2004, Task Force members participated in a number of workshops and meetings, including: a Regional Technical Workshop on Seabird Bycatch and Mitigation in Kaoshiung, Taiwan (January 2004); the 3<sup>rd</sup> International Conference on Albatrosses and Petrels in Montevideo, Uruguay, (August 2004); the 4<sup>th</sup> International Fisheries Observer Conference in Sydney, Australia (November, 2004); the Meeting of Parties to the Agreement for the Conservation of Albatrosses and Petrels in Hobart, Australia (November 2004)
- *Technology Transfer and Outreach:* In 1999 and 2000, the world's most comprehensive and scientifically rigorous experiments evaluating the effectiveness of seabird avoidance measures were conducted in the Bering Sea and Gulf of Alaska by a scientists from the Washington Sea Grant Program (WSGP). Since that time, findings from this research have resulted not only in domestic regulatory changes, but also changes in requirements in regional fisheries management organizations, such as the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR). Additionally, this technology has been shared with other longlining countries and an educational outreach video "Off the Hook" has been distributed widely.
- *Research and Gear Experiments:* NMFS and the U.S. Fish and Wildlife Service continue to collaborate with university Sea Grant programs, longline industry and other non-government groups, and in some instances jointly funded scientific studies by researchers on developing and/or evaluating the effectiveness of seabird mitigation devices. Recent efforts have included gear studies and sea trials on: streamer lines, line shooters, underwater setting chutes, side-setting, integrated weight groundlines, and on bait studies assessing bait dying and thawing. Research results have been presented at domestic and international scientific meetings.

3) International Communications Relating to Sea Turtles, Sharks and Seabirds: Task Force members participated in a number of activities designed to communicate U.S. concern regarding bycatch of sea turtles, sharks, and seabirds. As noted above, many of these international communications and other activities focused on further dissemination of the results of the recent U.S. gear experiments relating to sea turtle bycatch in swordfish longline fisheries. Recent activities included:

- A follow-up diplomatic demarche (cable) relating to sea turtle bycatch was sent to flag states with significant longline fleets (and Taiwan). This cable: expressed continued U.S. concern relating to sea turtle bycatch; communicated the results of recent U.S. studies relating to gear/bait modifications and safe handling practices in swordfish longline fisheries; noted opportunities for future collaborative research and technology transfer relating to sea turtle bycatch reduction in longline fisheries; encouraged flag states to participate fully in international/multilateral efforts to reduce sea turtle bycatch; and encouraged flag states to participate in the FAO COFI Technical Consultation on Sea Turtle Conservation and Fisheries (November 29- December 2, 2004 in Thailand). The cable further outlined U.S. goals for the Technical Consultations. More information on Task Force efforts relating to the FAO Technical Consultations follows below.
- Over the last year, the United States has continued to use international fishery management organizations and bilateral relationships to call attention to the international problems of sea turtle bycatch and incidental catch of seabirds and sharks in longline fisheries. We have worked to sensitize foreign governments to the importance of this issue to the United States and have stressed the need for their active engagement as part of an effective strategy for the conservation of these species. More recently, we have stepped up efforts to seek concrete action on the part of foreign governments and fishing industries. In this regard, the Administration's efforts to address this pressing problem have focused on the following key areas:
  - 1) Obtaining additional data on the level of sea turtle interaction with longline fisheries including distribution by time, depth and area;
  - 2) Research into new fishing gear and techniques to reduce sea turtle bycatch, including gear modifications, alternative baits, and alternative fishing strategies;
  - 3) Identification of interim measures to promote at the international level to reduce sea turtle bycatch, while efforts continue to further identify and refine possible solutions through numbers 1 and 2, above; and
  - 4) Providing technical assistance and outreach to foreign nations to document sea turtle interactions in longline fisheries, conduct gear modification experiments to reduce sea turtle bycatch, and implement safe-handling practices to reduce sea turtle injury and mortality
  - 5) Promoting full participation in the 2004 FAO Technical Consultation.

4. Other Task Force Activities: In addition to tasks specifically associated with the Task Force Action Plan, members of the Task Force participated in the following activities:

- *Inter-American Sea Turtle Convention* – The United States was a driving force behind efforts to negotiate Inter-American Convention for the Protection and Conservation of Sea Turtles in the Western Hemisphere. The Convention, which entered into force in May 2001, is the first international treaty dedicated solely to the conservation of sea turtles. It establishes a comprehensive framework for international efforts to protect sea turtles and their habitats, including specific provisions relating to the interaction of sea



turtles in commercial fisheries. The United States is continuing to take a lead role – currently working with the other Parties to establish the framework, including a permanent Secretariat, for the Parties to carry out their obligations of the Convention.

- *Indian Ocean Sea Turtle Memorandum of Understanding* – The Memorandum of Understanding (MOU) on the Conservation and Management of Marine Turtles of the Indian Ocean and Southeast Asia, and its associated Conservation and Management Plan (CMP), provide a similar comprehensive framework for the conservation and protection of sea turtles and their habitats in the Indo-Pacific region. Though non-binding, the MOU and CMP contain strong, forward looking provisions that, if effectively implemented, will advance conservation of endangered sea turtles populations and promote their recovery. Here again, the United States continues to work to establish through the MOU/CMP a strong and effective sea turtle conservation regime. However, it should be noted that the recent tsunami in this region will have an as yet unknown impact on implementation of this MOU and its associated CMP.
- *IATTC Bycatch Working Group* – At its Annual Meeting in June 2003, the Inter-American Tropical Tuna Commission (IATTC) adopted a resolution directing the Bycatch Working Group to develop a three-year program to mitigate sea turtle bycatch, including identification of measures for improved fishing gear and techniques. The Bycatch Working Group of the IATTC met January 13-16, 2004, in Kobe, Japan, to carry out this mandate. The Working Group recommended a set of data collection and research activities for consideration by the IATTC at its June 2004 meeting. In addition, Japan presented a recommendation, supported strongly by the United States, that longline vessels operating in the Eastern Pacific Ocean be required to use offset circle hooks and prohibited from using squid as bait in all sets shallower than 120 meters. While not all countries were prepared to endorse this recommendation at the Working Group meeting, the Commission did adopt the recommendations of the Bycatch Working Group at the June 2004 IATTC meeting.
- *ICCAT Recommendation on Sharks* – At its 2004 Annual Meeting, the International Commission for the Conservation of Atlantic Tunas (ICCAT) adopted a resolution calling for, among other things, a shark finning prohibition that requires that ICCAT members and cooperating parties have onboard fins that total no more than 5% of the weight of sharks (carcasses) onboard up to the point of first landing. Additionally, Contracting Parties, Cooperating non-Contracting Parties, Entities or Fishing Entities will be required to collect scientific data for catches of sharks. The United States was instrumental in proposing and gaining support for this groundbreaking decision.
- During 2004, Task Force members also conducted economic studies of the costs of protection and other mitigation measures for Pacific sea turtle nesting sites and habitat. To date, sites have been studied or are in the process of study in Papua, Indonesia, Terengganu, Malaysia, and the Solomon Islands for leatherback and hawksbill sea turtles. Further studies will examine additional sites and possibly other sea turtle species. These costs will help assess alternative conservation strategies, help identify sites with potentially large pay-offs for conservation, and help potential donors and others

interested in sea turtle conservation structure funding. These studies are conducted in cooperation with a number of non-governmental organization and academic partners. Other economic studies are currently researching the economics of Hawaiian longline sea turtle conservation, limited entry programs for highly migratory species fisheries focused on sea turtle conservation, and optimum at-sea conservation policy instruments under uncertainty. These studies are conducted in cooperation with U.S. academic institutions.

- *FAO Technical Consultation* – During the Twenty-fifth Session of the FAO Committee on Fisheries in February 2003, the U.S. Delegation worked successfully with Japan and other delegations for a decision by the FAO to convene a Technical Consultation on Sea Turtle Conservation and Fisheries. The Technical Consultation, which took place in Thailand during November 29- December 2, 2004: (a) reviewed the status of the sea turtle species that are of concern and the overall impact fisheries have on their populations; (b) explored where data collection can be initiated or improved, where existing data on fisheries effort and turtle distribution can be used to estimate interactions where empirical data do not exist, and how data collected can best be used to develop effective conservation and management measures; (c) included the fishing industries in developing solutions to reduce sea turtle bycatch and inform the fishing industries of the nature of the problem, the impact their operations have on sea turtles; (d) promoted research on gear modifications and fishing practices that will reduce sea turtle bycatch; (f) discussed and considered measures that could be adopted to immediately reduce the impact of fisheries on sea turtle populations; and (g) promoted involvement of Regional Fisheries Management Organizations in identifying solutions and implementing measures to reduce sea turtle bycatch.

A subgroup of Task Force members was created to work to further develop U.S. positions for the FAO Technical Consultations and to ensure that U.S. views on the agenda and desired outcomes of the Consultations were clearly articulated to the FAO and participating members. Along these lines, the United States worked closely with the Government of Japan to coordinate positions.

The FAO Technical Consultations resulted in a set of recommendations related to future work on sea turtle conservation and the reduction of sea turtle mortality in fishing operations. These recommendations reflect recent research and management activities in the United States and elsewhere,. Among other things, the recommendations call on the FAO to develop Technical Guidelines for the reduction of sea turtle mortality in fishing operations that are based on guidelines agreed by the Technical Consultation. The Draft Report of the Technical Consultations (including its recommendations) are currently available from NMFS. These new Guidelines will likely be valuable as the United States continues its work to address sea turtle bycatch on the domestic, bilateral and multilateral front.

## CONCLUSION

During 2004, the United States continued its efforts to secure international agreements to establish standards and measures for bycatch reduction that are comparable to the standards and measures applicable to United States fishermen. It is the opinion of NMFS that it is both necessary and appropriate for the United States to continue its efforts to seek international agreements that establish standards and measures for bycatch reduction that are comparable to those applicable to U.S. fishermen.